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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.: 10/738,936  
Applicant: Atsushi Ishii  
Filed: December 17, 2003  
Group #: 2841  
Examiner: Sean Phillip Kayes

Confirmation Number: 8473

Docket No: SLA.1312  
Customer No: 55376  
For: *GPS-Assisted Mobile Phone Clock for use in Non-digital Service Coverage Areas*

MS Appeal  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

**APPEAL BRIEF UNDER 37 C.F.R. §41.37**

In support of the appeal to the final rejection of the claims in the above-referenced application, dated December 11, 2006, and the Notice of Appeal, filed March 8, 2007, Appellants respectfully submit the following Appeal Brief.

**1. Statement of the Real Party in Interest under 37 C.F.R. §41.37 (c)(1)(i)**

The real party in interest is Sharp Laboratories of America, Inc., having a place of business at Camas, Washington.

**2. Status of Related Appeals and Interferences under 37 C.F.R. §41.37(c)(1)(ii).**

There are no related Appeals or Interferences.

**3. Status of all Claims under 37 C.F.R. §41.37(c)(1)(iii).**

Claims 1-13 are pending. All claims stand rejected. All claims pending in the Application are hereby Appealed.

There are 2 independent claims: claims: 1 and 8.

**4. Status of Amendments under 37 C.F.R. §41.37(c)(1)(iv)**

No amendments after final rejection have been filed.

**5. Summary of the Claimed Subject Matter under 37 C.F.R. §41.37(c)(1)(v)**

The invention is a method of setting an internal clock in a GPS-equipped mobile communication device when the mobile communication device is not in a digital service area. The method of the invention includes powering-up the mobile communication device; determining whether digital service is available, and, if digital service is not available, activating a GPS receiver in the mobile communication device and detecting a GPS time signal from any GPS satellite. The internal clock in the communication device is then set from the GPS time signal.

As there is no guidance provided by the U. S. Patent and Trademark Office as to *how* the independent claims are to be linked to the drawings and specification, **Applicant has adopted the following format, which includes recitation of the independent claims, annotated with reference numbers, figure numbers and specification page and line numbers, wherein a representation, *e.g.*, (10 Fig. 1 6/1-3) directs the reader to reference number 10 of Fig. 1, and to specification page 6, lines 1 to 3.**

Claim 1. A method of setting an internal clock in a GPS-equipped mobile communication device (10 Fig. 1 4/22-7/11) when the mobile communication device is not in a digital service area, comprising:

powering-up the mobile communication device (12 Fig. 1 5/3);

determining whether digital service is available (14 Fig. 1 5/4-5), and, if digital service is not available, activating (5/5) a GPS receiver in the mobile communication device;

detecting (16 Fig. 1 5/8) a GPS time signal from any GPS satellite, and  
setting the internal clock in the mobile communication device from the GPS time  
signal (5/8-13).

Claim 8. A method of setting an internal clock in a GPS-equipped mobile  
communication device (10 Fig. 1 4/22-7/11) when the mobile communication device is not in a digital  
service area (5/2-4), comprising:

determining whether digital service is available (14 Fig. 1 5/4-5), including determining  
whether digital service is available by determining the elapsed time from the last receipt of a digital  
service contact (6/10-13), and, if digital service is not available,

activating (5/5) a GPS receiver in the mobile communication device;

detecting (16 Fig. 1 5/8) a GPS time signal from any GPS satellite, and

setting the internal clock in the mobile communication device from the GPS time  
signal (5-8-13).

**6. Grounds of Rejection to be Reviewed on Appeal under 37 C.F.R. §41.37(c)(1)(vi)**

**Ground A:** Claims 1, 2, 4-8, and 10-13 stand rejected under 35 U.S. C. § 103(a) as being  
unpatentable over by U. S. Patent No. 6,427,120 B1 to Garin *et al.* in view of U. S. Patent No.  
5,724,316 to Brunts.

**Ground B:** Claims 3 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable  
over '120 in view of '316 and U. S. Patent No. 6,009,130 to Lurey *et al.*

**7. Arguments under 37 C.F.R. § 41.37 (c)(1)(vii)**

**Ground A:**

Claim 1 was previously amended to clarify that the internal clock in the mobile

communication device (MCD) is set from the GPS time signal. The MCD of the invention does not have a constantly activated GPS receiver. The MCD activates the GPS receiver for adjusting the MCD clock only if a digital service signal is not detected. This is described on page 5 of the Specification as filed, lines 3-5. The Examiner, in the last Office action, applied the '120 reference and the '316 reference under 35 U.S. C. § 103(a), however, it still appears from the '120 reference that the system of that reference works somewhat opposite to the method of the invention. Specifically, in col 6, lines 34-44, '120 acquires plural GPS signals to determine its location, which is what the GPS system is intended to do. The Examiner is correct in that such GPS signals will include a time signal, however, it also appears that the '120 device always has a "live" GPS receiver, whereas the method of the invention incorporates a switchable GPS receiver which is activated only upon non-receipt of a digital service signal. The Examiner correctly notes that the GPS receiver of '120 is not active when the device is turned off, which is true of many electronic devices: the "on" switch must be on for the device to work. However, even when the device claimed herein is "on", its GPS receiver is NOT on, unless the a digital phone service is NOT available. The Examiner goes on at length in para 3 of the Office action about the features of '120, however, these comments are largely irrelevant, as there is nothing in '120 to teach or suggest activating a GPS receiver to acquire a time signal when a digital phone signal is not acquired. While '316 may teach setting a clock from a GPS signal, the inclusion of '316 in a 103 rejection does not makeup for the shortcomings of the primary reference, which neither teaches nor suggests that the MCD activates an internal GPS only when a digital signal, which digital signal is clearly that of a digital phone service, is not available.

'120, col. 5, lines 54-65, applied by the Examiner, describes use of a GPS signal from a data center, but does not relate the use of the GPS time signal to the absence of a digital service

signal - which, of course, would not work at all, *e.g.*, if there is no digital service signal in '120, it cannot relay the GPS information. This is where '120 is the reverse of the method of the invention, because, if the MCD of '120 cannot receive a GPS signal, one is sent to it from a central facility, whereas if the MCD of the method of the invention cannot receive a digital service signal, it activates its GPS receiver to determine a proper time setting.

The Examiner's argument in the last paragraph of section 3 ("At the time of the invention....") does not address the clear language of Applicant's claims: certainly, '120 and '316 could be combined, but that combination would not produce the claimed invention of Applicant, because the Examiner's combination would not trigger a GPS receiver in the absence of a digital phone signal. The only place the Examiner can possibly find a suggestion in the two applied references to activate a GPS receiver in the absence of a digital signal is from Applicant's teaching. While both references describe various concerns about signal availability, neither of the references teaches nor suggests, in combination or alone, Applicant's method of waiting to activate a GPS device to set an internal clock in the absence of a digital signal. This is not to say that either of the patentees could not have described a method such as Applicant's, they simply did not, most likely because Applicant's method was not obvious to either of the patentees. Applicant, having invented a novel method of setting an internal clock in a mobile communication device in the absence of a digital signal, is entitled to a patent on the invention.

Claim 1 is allowable over the applied art because the applied art does not teach nor suggest (1) activating a GPS receiver in a MCD when digital service is not present, and (2) setting an internal clock in the MCD from the GPS time signal.

Claims 2 and 4-7 are allowable with their allowable parent claim.

Claim 8 is allowable for the reasons set forth in connection with claim 1.

Claims 10-13 are allowable with their allowable parent claim.

**Ground B:**

Claims 3 and 9 are allowable with their allowable parent claims.

Having shown that the applied art does not teach nor suggest the Applicant's invention as claimed, Applicant request that the Examiner's final rejection of these claims be reversed.

Customer Number

Respectfully Submitted,

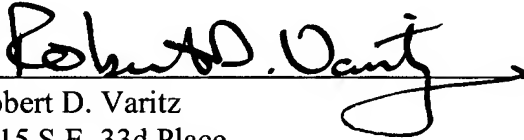
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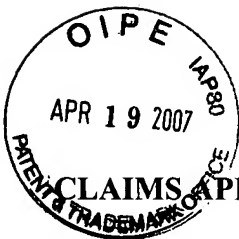
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8. **CLAIMS APPENDIX TO APPELLANT'S BRIEF under 37 C.F.R. § 41.37 (c)(1)(viii)**

The claims on appeal in the above-referenced application are reproduced hereinbelow as follows:

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Claim 1. A method of setting an internal clock in a GPS-equipped mobile

communication device when the mobile communication device is not in a digital service area,

comprising:

powering-up the mobile communication device;

determining whether digital service is available, and, if digital service is not available,

activating a GPS receiver in the mobile communication device;

detecting a GPS time signal from any GPS satellite, and

setting the internal clock in the mobile communication device from the GPS time

signal.

Claim 2. The method of claim 1 wherein said determining includes determining whether digital service is available by determining the elapsed time from the last receipt of a digital service contact.

Claim 3. The method of claim 1 wherein said determining includes determining whether digital service is available by scanning for all possible digital channels.

Claim 4. The method of claim 1 wherein said detecting includes detecting after a pre-determined period of time, a GPS time signal to update the internal clock in the mobile

communication device.

Claim 5.                   The method of claim 1 wherein said detecting includes detecting a difference between the GPS time signal and the internal clock time, and, if the difference exceeds a pre-determined value, updating the internal clock time as a function of the GPS time signal.

Claim 6.                   The method of claim 1 wherein a user interface is provided to allow the user to regulate the GPS time adjustment.

Claim 7.                   The method of claim 1 which further includes detecting location from plural GPS satellites and determining local time as a function of the GPS time signal and location.

Claim 8.                   A method of setting an internal clock in a GPS-equipped mobile communication device when the mobile communication device is not in a digital service area, comprising:

determining whether digital service is available, including determining whether digital service is available by determining the elapsed time from the last receipt of a digital service contact, and, if digital service is not available,

activating a GPS receiver in the mobile communication device;

detecting a GPS time signal from any GPS satellite, and

setting the internal clock in the mobile communication device from the GPS time



signal.

Claim 9.                   The method of claim 8 wherein said determining includes determining whether digital service is available by scanning for all possible digital channels.

Claim 10.                 The method of claim 8 wherein said detecting includes detecting after a pre-determined period of time, a GPS time signal to update the internal clock in the mobile communication device.

Claim 11.                 The method of claim 8 wherein said detecting includes detecting a difference between the GPS time signal and the internal clock time, and, if the difference exceeds a pre-determined value, updating the internal clock time as a function of the GPS time signal.

Claim 12.                 The method of claim 8 wherein a user interface is provided to allow the user to regulate the GPS time adjustment.

Claim 13.                 The method of claim 8 which further includes detecting location from plural GPS satellites and determining local time as a function of the GPS time signal and location.

**9. EVIDENCE APPENDIX TO APPELLANT'S BRIEF under 37 C.F.R. § 41.37 (c)(1)(ix)**

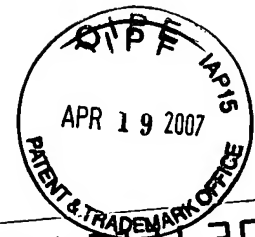
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**10. RELATED PROCEEDINGS APPENDIX TO APPELLANT'S BRIEF under 37 C.F.R. § 41.37 (c)(1)(x)**

NONE

**CERTIFICATE OF EXPRESS MAILING**

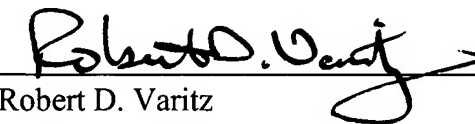
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I hereby certify that the attached Appeal Brief and a PTO Form 2038 Credit Card authorization in the amount of \$500.00 to pay the requisite Appeal Fee, are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to:

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